

Listing of Claims:

1. (currently amended) A multimedia transfer apparatus comprising:

a housing;

a plurality of media readers disposed adjacent one another within the housing;

a central processing unit in electrical communication with the plurality of media readers and disposed within the housing;

a main memory in electrical communication with the central processing unit and disposed within the housing;

a non-volatile storage medium in electrical communication with the central processing unit and disposed within the housing;

~~one or more~~ an encoder module modules in electrical communication with the central processing unit and disposed within the housing and configured to encode data read by said media readers in a specified encoding format; and

a data communication interface in electrical communication with the central processing unit and disposed within the housing and configured to copy said encoded data to a media storage and playback apparatus.

2. (original) The multimedia transfer apparatus as in claim 1 wherein said encoder modules are comprised of hardwired logic.

3. (original) The multimedia transfer apparatus as in claim 2 further comprising:

a central processing unit for executing a transfer program, said transfer program scheduling reading of said data by said media readers and encoding of said data by said encoder modules.

4. (original) The multimedia transfer apparatus as in claim 3 wherein said transfer program schedules reading and encoding in parallel.

5. (original) The transfer apparatus as in claim 1 wherein said media readers are CD drives adapted to read data from CDs.

6. (original) The transfer apparatus as in claim 1 wherein said media readers are DVD drives adapted to read data from DVDs.

7. (withdrawn) The transfer apparatus as in claim 5 further comprising:  
one or more shelves coupled to said multimedia transfer apparatus for temporarily supporting jewel cases for CDs inserted in said CD drives.

8. (withdrawn) The transfer apparatus as in claim 7 wherein said shelves are moveably engaged with a set of guide rails within said transfer apparatus and

wherein said shelves may be positioned within said transfer apparatus by moving along said guide rails.

9. (withdrawn) The transfer apparatus as in claim 7 further comprising retractable wheels rotatably coupled to said transfer apparatus to facilitate transporting said transfer apparatus.

10. (withdrawn) The transfer apparatus as in claim 9 further comprising an extendable handle fixedly coupled to said transfer apparatus to facilitate transporting the transfer apparatus.

11. (withdrawn) The transfer apparatus as in claim 1 wherein said data communication interface is an IEEE 1394 interface.

12. (withdrawn) The transfer apparatus as in claim 1 wherein said data communication interface is an Ethernet interface.

13. (original) The transfer apparatus as in claim 1 wherein said specified encoding format is MP3.

14. (original) The transfer apparatus as in claim 1 wherein said specified encoding apparatus is MPEG-2.

15. (original) The transfer apparatus as in claim 1 further comprising control logic to prevent ejecting any disc or opening any tray at such time that would endanger the operator or media.

16. (original) A multimedia transfer system comprising a plurality of multimedia transfer apparatus as in claim 1 interconnected via local high-speed network to form an integrated processing ensemble of higher capacity.

17. (currently amended) A multimedia transfer apparatus comprising:

a housing;

a plurality of media reading means disposed within the housing for reading multimedia data from a particular media format;

processing means disposed within the housing;

memory means disposed within the housing;

non-volatile storage means disposed within the housing;

encoding means disposed within the housing for encoding said data; and

multimedia transfer means disposed within the housing for transmitting said multimedia data to a multimedia playback and storage apparatus.

18. (original) The multimedia transfer apparatus as in claim 17 wherein said encoding means is comprised of hardwired logic.

19. (original) The multimedia transfer apparatus as in claim 18 further comprising:

scheduling means for scheduling reading of said data by said media reading means and encoding of said data by said encoding means.

20. (original) The multimedia transfer apparatus as in claim 19 wherein said scheduling means schedules reading and encoding in parallel.

21. (original) The transfer apparatus as in claim 17 wherein said media reading means are CD drives and said media format is a CD format.

22. (original) The transfer apparatus as in claim 17 wherein said media reading means are DVD drives adapted to read data from DVDs.

23. (withdrawn) The transfer apparatus as in claim 21 further comprising:  
one or more support means coupled to said multimedia transfer apparatus for temporarily supporting jewel cases for CDs inserted in said CD drives.

24. (withdrawn) The transfer apparatus as in claim 23 wherein said support means are moveably engaged with a set of guide rails within said transfer apparatus and wherein said shelves may be positioned within said transfer apparatus by moving along said guide rails.

25. (withdrawn) The transfer apparatus as in claim 17 wherein said multimedia transfer means is comprised of an IEEE 1394 interface.

26. (withdrawn) The transfer apparatus as in claim 17 wherein said multimedia transfer means is comprised of an Ethernet interface.

27. (original) The transfer apparatus as in claim 17 wherein said specified encoding format is MP3.

28. (original) The transfer apparatus as in claim 17 wherein said specified encoding apparatus is MPEG-2.

29. (currently amended) A computer-implemented method for transferring multimedia content comprising:

disposing a plurality of media readers in proximity to one another within a device, the plurality of media readers including first, second, and third media readers;

the first media reader reading first multimedia data from a first CD/DVD;

the second media reader reading second multimedia data from a second CD/DVD in parallel with reading multimedia data from the first CD/DVD;

an encoder disposed within the device encoding said first multimedia data to produce first encoded data in parallel with encoding said second multimedia data to produce second encoded data ~~reading multimedia data from a second CD/DVD;~~

the third media reader reading third multimedia data from a third CD/DVD in parallel with encoding said first multimedia data and encoding said second multimedia data;

encoding said ~~second~~ third multimedia data to produce ~~second~~ third encoded data; and

transmitting said first, ~~and second, and third~~ encoded data to a multimedia storage and playback apparatus.

30. (original) The method as in claim 29 further comprising:

identifying said first CD/DVD and said second CD/DVD in a CD/DVD database; and

reading CD/DVD-related data for said first CD/DVD and said second CD/DVD from said CD/DVD database.

31. (original) The method as in claim 30 further comprising:

storing said CD/DVD-related data on Said storage and playback apparatus.

32. (original) The method as in claim 30 wherein said CD/DVD-related data is title and track data for said first CD/DVD and said second CD/DVD.

33. (currently amended) The method as in claim 29 further comprising:

a fourth media reader reading ~~third~~ fourth multimedia data from a ~~third~~ fourth CD/DVD in parallel with reading said ~~first~~ third multimedia data from said ~~first~~ third CD/DVD;

encoding said ~~third~~ fourth multimedia data to produce ~~third~~ fourth encoded data in parallel with reading multimedia data from ~~said second CD/DVD and a fourth~~ a fifth CD/DVD;

encoding said ~~second and fourth~~ fifth multimedia data to produce ~~second and fourth~~ fifth encoded data, ~~respectively~~; and

transmitting said first, second, third, ~~and fourth~~, and fifth data to a multimedia storage and playback apparatus.

34. (currently amended) The method as in claim 33 further comprising:



identifying said first, second, third, ~~and fourth~~, and fifth CD/DVD in a CD/DVD database; and

reading CD/DVD-related data for said first, second, third, ~~and fourth~~, and fifth CD/DVD from said CD/DVD database.

35. (original) The method as in claim 34 further comprising:

storing said CD/DVD-related data on said storage and playback apparatus.

36. (withdrawn) The method as in claim 30 further comprising using an optical character reader (OCR) wand to capture identifying content from a CD/DVD when CD/DVD cannot be identified in said CD/DVD database.

37. (withdrawn) The method as in claim 36 wherein said identifying content is a bar-coded SKU.

38. (withdrawn) The method as in claim 36 further comprising updating said CD/DVD database with said identifying content.

39. (currently amended) A method for providing a multimedia transfer service comprising:

transporting a multimedia transfer device to a user's home, the multimedia transfer device comprising,

a housing;

a plurality of media readers disposed adjacent one another within the housing;

a central processing unit in electrical communication with the plurality of media readers and disposed within the housing;

an encoder module in electrical communication with the central processing unit and disposed within the housing and configured to encode data read by said media readers in a specified encoding format; and

a data communication interface in electrical communication with the central processing unit and disposed within the housing and configured to copy said encoded data to a media storage and playback apparatus,

said user having a collection of multimedia content stored on physical media;

and

using said multimedia transfer device to transfer said multimedia content from said physical media to a mass storage device at said user's home.

40. (original) The method as in claim 39 further comprising:

indexing said multimedia content on said mass storage device on behalf of said user.

41. (original) The method as in claim 40 wherein indexing comprises:

identifying said multimedia content with a code transmitted over a network link from said user's home to a multimedia content database; and

downloading information related to said multimedia content from said multimedia content database.

42. (original) The method as in claim 41 wherein said code is a hashing code identifying said multimedia content using a fingerprint of said multimedia content.

43. (original) The method as in claim 41 wherein said information related to said multimedia content includes a title of said multimedia content and/or track data for said multimedia content.

44. (original) The method as in claim 41 wherein said information related to said multimedia content includes album cover information.

45. (original) The method as in claim 41 wherein information related to said multimedia content includes song lyrics.

46. (original) The method as in claim 41 wherein information related to said multimedia content includes information about artists who created said multimedia content.

47. (original) The method as in claim 41 wherein information related to said multimedia content includes interactive content.

48. (original) The method as in claim 39 wherein said physical media is a compact disk ("CD").

49. (original) The method as in claim 39 wherein said physical media is a digital video disk ("DVD").

50. (original) The method as in claim 41 wherein downloading said information occurs concurrently with transferring said multimedia content.

51. (original) The method as in claim 41 wherein downloading said information occurs after transferring said multimedia content.

52. (original) The method as in claim 39 further comprising monitoring the efficiency with which said multimedia content is transferred from said physical media to said mass storage device.

53. (original) The method as in claim 52 wherein efficiency is determined by statistical analysis of performance parameters gathered during said transfer.

54. (original) The method as in claim 53 wherein said performance parameters include disc processing rate, transfer apparatus duty cycle, and a length of time one or more individual drives of said transfer apparatus are empty.